ENERGY ASSURANCE DAILY

Friday Evening, February 10, 2017

Major Developments

Explosion on Phillips 66 NGL Pipeline Shuts Williams' Paradis NGL Fractionation Plant in Louisiana February 9; Impacts at Least Two Gas Processing Plants, Three Offshore Gulf of Mexico Gas Pipeline Systems, and Two Offshore Production Facilities

Phillips 66 on Friday reported an explosion and fire on a natural gas liquid (NGL) pipeline located about 30 miles west of New Orleans, Louisiana. A company official said the explosion occurred at approximately 8:00 p.m. EST, Thursday while siz workers were conducting routine maintenance at the Paradis Pipeline Station. Two of the workers were injured and one worker remains unaccounted for, Phillips 66 said on Friday afternoon, adding that an investigation into the cause of the explosion was underway. By mid-day Friday, the affected pipeline had been isolated and remaining product in the line was continuing to burn off. The affected pipeline carries y-grade, a mixture of NGLs such as propane and butane, from Targa Resources' 750 MMcf/d Venice natural gas processing plant to Paradis, where Williams Co. operates a 32,000 b/d NGL fractionator. The shutdown has impacted oil and natural gas production as well as natural gas processing upstream of the incident location:

- Targa Resources notified Enbridge that it was restricting deliveries, effective gas day February 10, to the Venice gas plant from Enbridge's Mississippi Canyon Gas pipeline, which gathers offshore production from the Gulf of Mexico. Enbridge said it was working to determine delivery capability from Mississippi Canyon to the Kinetica Energy Express and High Point Gas Transmission pipeline systems.
- Williams Co. on Friday said it had shut the Paradis fractionator and had curtailed shippers on its Discovery Gas Transmission (DGT) pipeline, which gathers offshore production from the Gulf of Mexico and sends it to Williams' 600 MMcf/d Larose Gas Plant in Louisiana. Williams said the DGT system would remain shut in with no new nominations accepted until the issue was resolved. The Larose gas plant sends NGLs separated at the plant to the Paradis fractionator for processing and sends out pipeline-quality gas to several pipeline systems, including Texas Eastern, Transco, Gulf South, Bridgeline Gas, and Columbia Gulf.
- Due to the loss of gas processing facilities in Louisiana, **Texas Eastern Transmission** shut-in production, effective gas day February 11, at offshore Gulf of Mexico receipt points operated by Anadarko Petroleum, ExxonMobil, Shell, ENI, and other offshore producers.
- Anadarko Petroleum Corp. on Friday said it shut its Lucius and Heidelberg production facilities in the Gulf of Mexico following a fire at Phillips 66's Paradis Pipeline Station in Louisiana, according to a company notice.

http://www.piersystem.com/go/doc/6522/2180362

http://co.williams.com/operations-2/atlantic-gulf-operating-area/gulf-coast/

 $\underline{http://www.enbridge.com/Informational-Postings/Mississippi-Canyon/Notices/Critical.aspx}$

https://infopost.spectraenergy.com/InfoPost/TEHome.asp?pipe=TE

Reuters, 13:20 February 10, 2017

Reuters, 12:47 February 10, 2017

Reuters, 12:43 February 10, 2017

Update: Power Restoration Nearly Complete in Northeast U.S. February 10 after Winter Storm Hits February 9

A strong coastal winter storm producing heavy snow, rain, and strong winds moved through the Northeastern United States early Thursday morning knocking out power to at least 138,000 electric customers with impacts lasting into Friday. There were numerous reports of downed trees and power lines caused by wind gusts of more than 50 mph in some places. As of 3:30 p.m. EST on Friday, 6,153 customers remained without power. Eversource Massachusetts, the hardest hit utility with at least 80,000 customer outages, said it expects restoration efforts to be substantially complete by 6:00 p.m. EST Friday. PSEG Long Island, which reported at least 38,000 customer outages, said it had restored power to 99.8 percent of its customers by 9:45 p.m. EST on Thursday. The table below shows the latest reported outages by utility.

Northeast U.S. Customer Power Outages February 9 – 10, 2017			
Electric Utility	State	Latest Reported	
Eversource	CT	58	
Eversource	MA	3,365	
National Grid	MA	39	
Atlantic City Electric	NJ	2	
First Energy	NJ	140	
PSEG Long Island	NY	1,969	
FirstEnergy	PA	49	
PECO	PA	84	
PPL	PA	385	
National Grid	RI	62	
Total*		6,153	

^{*}Total outages represent only electric utilities listed in this table.

Sources:

http://www.weather.gov/

https://www.facebook.com/EversourceMA

https://www.psegliny.com/page.cfm/AboutUs/PressReleases/2017/020917-storm-930p

https://weather.com/news/news/winter-storm-niko-boston-blizzard-new-england-impacts

Restoration Nearly Complete after High Winds Knock Out Power to Over 12,000 NV Energy Customers in Nevada February 9

A winter storms producing rains and winds up to 90 mph knocked out power to at least 12,667 NV Energy customers in northern Nevada on Thursday. The largest outages were reported in Douglas and Washoe counties. As of 10:30 a.m. EST on Friday, 508 customers remained without power.

 $\underline{https://www.nvenergy.com/outage/view/outagelist_state.cfm}$

http://www.rgj.com/story/news/2017/02/09/s-flooduary-windy-wet-wintry-day-descends-reno-area/97686134/http://newsok.com/the-latest-12000-without-power-in-northern-nevada/article/feed/1164931

Exelon's 1,163 MW Byron Nuclear Unit 1 in Illinois Reduced to 71 Percent by February 10 On the morning of February 9 the unit was operating at full power.

http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2017/

Update: Entergy's 1,207 MW Grand Gulf Nuclear Unit 1 in Mississippi at Full Power by February 10

On the morning of February 9 the unit was operating at 91 percent. The unit shut on September 9 due to the loss of the residual heat remover pump.

http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2017/

Alta Wind's 132 MW Pinyon Pines Wind Unit 2 in California Shut by February 9

The unit entered an unplanned outage.

http://content.caiso.com/unitstatus/data/unitstatus201702091515.html

Petroleum

Update: Valero Restarts SRU at Its 335,000 b/d Port Arthur, Texas Refinery February 9 – Source

Valero Energy Corp restarted a sulfur recovery unit (SRU) at its Port Arthur, Texas refinery on Thursday, said a source familiar with plant operations. Valero began working to restart the SRU, one of six at the refinery, on Tuesday, the source said. SRUs recover sulfur from hydrogen sulfide removed from motor fuel feedstocks in compliance with U.S. environmental rules.

Reuters, 14:33 February 9, 2017

Update: Total Restarts FCCU, Alkylation Unit at Its 225,500 b/d Port Arthur, Texas Refinery February 9, 10

Total SA returned the fluidic catalytic cracking unit (FCCU) at its Port Arthur, Texas refinery to production on Thursday night, a source familiar with plant operations said on Friday. The FCCU had been out of production on warm circulation since a Tuesday morning fire damaged electrical systems on the unit. In addition, Total restarted an alkylation unit at the refinery on Friday morning, a source said. The alkylation unit receives feedstock from FCCU and was shut after the FCCU was taken out of production. Total will be ramping up the refinery's output over the weekend, the source said. Production at the refinery was cut back to 140,000 b/d after the FCCU was taken offline. Reuters, 13:19 February 10, 2017

Reuters, 9:44 February 10, 2017

Bridger Pipeline Fined \$1 Million for 2015 Montana Oil Spill

The Montana Department of Environmental Quality (DEQ) on Thursday announced a \$1 million fine against Bridger Pipeline LLC for a 31,000 gallon oil spill into the Yellowstone River that also contaminated the water supply for Glendive, Montana. On January 17, 2015, the pipeline split at a weld and oil began spilling into the Yellowstone River. Ice covering the river made recovery and containment difficult, at times halting the effort. Much of the oil traveled downstream under the ice, according to the DEQ. Crews recovered less than 10 percent of the oil. According to the DEQ, \$200,000 of the penalty will go to the state's general fund and \$800,000 will fund environmental projects. A spokeswoman for True Oil, which operates Bridger Pipeline, says the company is prepared to begin working on the projects.

http://deq.mt.gov/Portals/112/DEQAdmin/DIR/Documents/Bridger%20Consent%20Order/Final%20Bridger%20Consent%20Order.pdf?ver=2017-02-09-121902-843

http://missoulian.com/news/state-and-regional/pipeline-company-to-pay-montana-m-for-oil-spill/article_2a62b3a2-5b9e-5da1-991e-30870269933b.html

Natural Gas

Enbridge Reports AGI Fault at Its Tilden Gas Plant in Texas February 9

Enbridge reported communication errors caused the plant to fault. The flow differential resulted in a loss of acid gas volume and the acid gas injectors (AGIs) faulted causing the plant to go down. All gas was routed to the flare to curtail emissions, while flow and process were adjusted to minimize downtime. The AGI faults were corrected and the system was brought back online.

http://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=252167

Williams Partners to Acquire Additional Interests in Two Marcellus Shale Gathering Systems, Sell Ownership Stake in Delaware Basin, Ranch Westex Assets February 9

Williams Partners L.P. on Thursday announced it entered into an agreement with Western Gas Partners, LP and certain affiliates pursuant to which Williams Partners will increase its ownership stake in two Marcellus Shale natural gas gathering systems already operated by Williams Partners. In exchange, Western Gas and its affiliates will receive Williams Partners' 50 percent ownership stake in Delaware Basin JV Gathering LLC (DBJV) that is operated by Western Gas. Under the terms of the transaction, Williams Partners will receive Western Gas' 33.75 percent ownership stake in both the Rome and Liberty natural gas gathering systems in northern Pennsylvania, and a cash payment of \$155 million. When closed, the transaction will increase Williams Partners' ownership interest to 67.5 percent in both the Rome and Liberty gathering systems that are operated by Williams Partners and included in its Bradford Supply Hub in the Northeast G&P segment. Current throughput on the Rome and Liberty gathering systems is approximately 1.6 Bcf/d. In addition, Williams Partners has entered into a separate agreement with Anadarko Petroleum Corporation to sell Williams Partners' 33.3 percent interest in the Ranch Westex gas processing plant in the Delaware Basin for \$45 million in cash. The two transactions are expected to close in late first-quarter or early second-quarter 2017.

 $\frac{http://investor.williams.com/press-release/williams/williams-partners-agrees-acquire-additional-interests-two-marcellus-shale-gat$

Other News

Nothing to report.

International News

Venezuela Delays Crude Shipments amid Operational Mishaps, Low Output

Venezuelan state oil company PDVSA delayed and canceled crude deliveries to commercial partners in recent months, according to the internal company documents seen by Reuters. From October through January, PDVSA canceled or delayed delivery of almost 7 million barrels of crude due to cargoes being rescheduled or skipped, often because it did not have enough oil available, according to the documents. Most pending cargoes were supposed to be delivered to regular buyers including U.S. Phillips 66 and Thai TIPCO Asphalt, which hold supply contracts for some 10 monthly cargoes of Venezuelan heavy crude, or about 180,000 b/d. The accumulated delays to these partners represented 30,000 b/d at the end January, according to the documents. http://www.downstreamtoday.com/news/article.aspx?a id=55287

Eni Lifts Force Majeure on Nigeria's Brass River Oil Exports

Eni Spa lifted the force majeure on Nigeria's Brass River crude oil exports that had been in place since late May 2016 due to a pipeline attack, a spokesman said on Friday. The company officially lifted the designation on January 29, the spokesman said. The move leaves just one grade, the Shell-exported Forcados, under force majeure. A series of attacks last year had brought Nigeria's crude oil production past 20-year lows Reuters, 11:24 February 10, 2017

Energy Prices

U.S. Oil and Gas Prices February 10, 2017				
	Today	Week Ago	Year Ago	
CRUDE OIL West Texas Intermediate U.S. \$/Barrel	53.79	53.76	27.49	
NATURAL GAS Henry Hub \$/Million Btu	3.10	3.10	2.17	

Source: Reuters

Links

This Week in Petroleum from the U.S. Energy Information Administration (EIA) http://www.eia.gov/oog/info/twip/twip.asp

Updated every Wednesday.

Weekly Petroleum Status Report from EIA

http://www.eia.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html Updated after 10:30 AM & 1:00 PM ET every Wednesday.

Natural Gas Weekly Update from EIA

http://www.eia.gov/oog/info/ngw/ngupdate.asp

Updated after 2:00 PM ET every Thursday.

ENERGY ASSURANCE DAILY

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http://www.oe.netl.doe.gov/ead.aspx

Please direct comments and questions to: ead@oe.netl.doe.gov